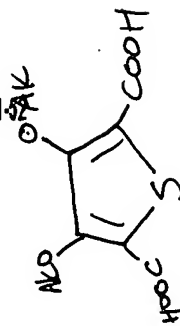


MAR 15 2007

Claim Status

1. (Currently Amended) A process for the thermal decarboxylation of dicarboxylic acids, ~~in particular 3,4-ethylenedioxythiophene-2,5-dicarboxylic acid,~~ as starting material, ~~characterized in that the~~ comprising: reacting the starting material is used as a solid and/or and, optionally, the reaction is carried out in the presence of a plurality of fluidized-bed bodies, and wherein ~~with the reaction being is~~ carried out in the absence of solvents, and discharging the decarboxylation product formed in the reaction, ~~in particular 3,4-ethylenedioxythiophene, being discharged from the~~ reaction zone in gaseous form.
2. (Currently Amended) The process as claimed in claim 1, characterized wherein ~~in that~~ the decarboxylation is carried out at a temperature of from 100 to 600°C, ~~preferably from 100 to 500°C, particularly preferably from 150 to 400°C.~~
3. (Currently Amended) The process according to ~~at least one of~~ claim[[s]] 1 ~~and 2,~~ characterized ~~in that~~ wherein the process is carried out continuously in a bubble-forming ~~or~~, turbulent, or jet-permeated fluidized bed or in an internally or externally circulating fluidized bed.
4. (Currently Amended) The process as claimed in ~~at least one of~~ claims 1 to 3, characterized ~~in that~~ wherein the reaction is carried out in the presence of an inert auxiliary gas, ~~in particular a gas selected from the group consisting of noble gases, nitrogen, water vapor, carbon monoxide, and carbon dioxide and mixtures thereof of various such inert auxiliary gases.~~
5. (Currently Amended) The process as claimed in ~~any of~~ claim[[s]] 1 to 4, characterized ~~in that~~ wherein the reaction is carried out in a fluidized-bed reactor in which fluidized bed bodies having a mean diameter (number average) greater than the particle diameter of the dicarboxylic acid ~~are used.~~
6. (Currently Amended) The process as according to ~~claimed in~~ claim 5, characterized ~~in that~~ wherein the fluidized bed bodies have a solids density p_s of $0.5 \text{ g} \cdot \text{cm}^{-3} < p_s < 6 \text{ g} \cdot \text{cm}^{-3}$.



7. (Currently Amended) The process according to as claimed in any of claim[[s]] 1 to 6, characterized in that wherein the fluidized bed bodies are used as heat transfer media wherein the fluidized bed bodies ~~which~~ are preheated outside the reaction zone and circulated through the reaction zone and comprise consist partly or entirely of a catalytically active material.
8. (Currently Amended) The process according to as claimed in any of claim[[s]] 1 to 7, characterized in that wherein the catalytically active material of the fluidized bed bodies comprises ~~consist partly or entirely of a catalytically active material, in particular copper or a copper salt, preferably CuCO₃.~~
9. (Currently Amended) The process according to as claimed in any of claims 1 to 8, characterized in that wherein any solid carried out from the reaction zone by the gas stream is separated off from the product by means of a cyclone and/or filter.
10. (Currently Amended) The process ~~as claimed in any of~~ according to claims 1 to 8, ~~characterized in that wherein the~~ unreacted solid starting material separated off from the product gas stream is recirculated batchwise or continuously to the reaction zone.
11. (New) The process according to claim 1 wherein the dicarboxylic acid is 3,4-ethylenedioxythiophene-2,5-dicarboxylic acid.
12. (New) The process according to claim 8 wherein the catalytically active material of the comprises CuCO₃.